

AMENDMENT TO THE CLAIMS

1. (currently amended) Keyless locking cylinder for a door to be locked with the following features:

- (a) a locking cylinder body being able to be introduced into a door;
- (b) a knob on the cylinder body and which extends from the cylinder body for the outside of the door to be locked, the knob being able to be actuated from the outside of the door in order to open the door from the outside;
- (c) a deactivation member which is able to deactivate the knob so that opening of the door using the knob is not possible, the deactivation member being able to be electronically actuated;
- (d) an access control means in the locking cylinder body which in response to an authorized transponder signal from a remote portable transponder unlocks the door and thereby permits opening of the door by making it possible for the user to actuate the knob from the outside of the door in order to open it, wherein the access control means comprises means for exchanging a wireless signal with the remote portable transponder and a verification means for verifying whether or not the remote portable transponder is authorized, wherein the remote portable transponder and the verification means are remote from one another and not in physical contact;
- (e) wherein the access control means comprising electronic and mechanical elements is entirely located within the locking cylinder body; and
- (f) a battery which is able to energize the access control means upon response of a request signal from the transponder;
- (g) further comprising an engagement means for transmitting a rotational movement as well as corresponding forces and/or moments, the engagement means having a drive mechanism and a take-off mechanism, wherein the drive mechanism and a take-off mechanism are coupled via at least one coupling element which is configured to move in an axial direction between a first

axial position in which the drive mechanism and the take off mechanism are rotationally coupled together and a second axial position in which the drive mechanism and the take off mechanism are rotationally decoupled, wherein:

- (h) in a decoupled state a rotation movement of the drive mechanism causes an essentially axial movement of the coupling of the coupling element, wherein the drive mechanism does not transmit a rotational force or a movement to the take off mechanism as the coupling element does not transmit a rotational movement and moves in an axial direction whereby axially movement of the coupling element prevents closure between the drive mechanism and the take off mechanism and wherein the essentially axial movement of the coupling element is not sufficient for transmitting the rotational movement of the drive mechanism to the take-off mechanism; and
- (i) that in a coupled state a rotational movement of the drive mechanism causes a rotational movement of the coupling element and the take-off mechanism so that transmission of rotational movement is allowed in the coupled state but no in the decoupled state.

2. (previously presented) Locking cylinder according to claim 1, the lock body is adapted and sized to be introduced into a door according to U.S. standards or European standards.

3. (previously presented) Locking cylinder according to claim 1, wherein the deactivation member is adapted to deactivate the knob such that idle movement of the knob is possible.

4. (previously presented) Locking cylinder according to claim 1, wherein the deactivation member is adapted to deactivate the knob such that movement of the knob is blocked.

5. (canceled)

6. (canceled)

7. (previously presented) Locking cylinder according to claim 1, wherein the access control means comprises a ferrite bar antenna which is also located within the cylindrical lock body.

8. (previously presented) Locking cylinder according to claim 1, wherein the access control means is adapted to communicate with a transponder by means of an alternating magnetic field.

9. (previously presented) Locking cylinder according to claim 1, further comprising protection means for protecting against drilling or tampering with the lock.

10. (canceled)

11. (canceled)

12. (canceled)

13. (canceled)

14. (currently amended) Door lock system comprising:

a keyless locking cylinder having a lock body, a knob on the cylinder body and which extends from the cylinder body being able to be actuated from the outside of the door in order to open the door from the outside, a deactivation member, which is able to deactivate the knob so that it cannot be actuated in order to open the door from the outside and an access control means which in response to a data signal from an authorized user

permits opening of the door by making it possible for the user to actuate the knob from the outside of the door in order to open it, wherein the access control means comprising electronic and mechanical elements is located entirely within the cylindrical lock body, (g) further comprising an engagement means for transmitting a rotational movement as well as corresponding forces and/or moments, the engagement means having a drive mechanism and a take-off mechanism, wherein the drive mechanism and a take-off mechanism are coupled via at least one coupling element in such a manner that;

- (h) in a decoupled state a rotation movement of the drive mechanism causes an essentially axial movement of the coupling of the coupling element, wherein the essentially axial movement of the coupling element is not sufficient for transmitting the rotational movement of the drive mechanism to the take-off mechanism; and
- (i) that in a coupled state a rotational movement of the drive mechanism causes a rotational movement of the coupling element and the take-off mechanism so that transmission of rotational movement is allowed in the coupled state but not in the decoupled state; and

a remote portable transponder having means for exchanging a wireless data signal comprising the transfer of information over a distance from a remote location which is not in physical contact with the access control means without the use of electrical conductors with the access control means of the lock, wherein the access control means comprises means for exchanging a wireless signal with the remote portable transponder and a verification means for verifying whether or not the remote portable transponder is authorized, and a battery for energizing the access control means upon response of a request signal from the remote portable transponder to thereby unlock the door lock system.

15. (currently amended) Method for securing a keyless locking cylinder for a door comprising:

providing a lock body being of generally cylindrical shape and being able to be introduced into a door;

providing a knob on the cylinder body and which extends from the cylinder body for the outside of the door to be locked, the knob being able to be actuated from the outside of the door in order to open the door from the outside;

providing a deactivation member which is able to deactivate the knob so that it cannot be actuated in order to open the door from the outside;

providing an access control means which is arranged in the lock body and which in response to a signal of an authorized remote portable transponder permits opening of the door by making it possible for the user to actuate the knob from the outside of the door in order to open it and thereby unlocks the door;

wherein the access control means comprises means for exchanging a wireless signal comprising the transfer of information over a distance from a remote device which is not in physical contact with the remote portable transponder and without the use of electrical conductors with the remote portable transponder and a verification means for verifying whether or not the remote portable transponder is authorized ;

providing the access control means entirely within the cylindrical lock body, the access control means comprising electronic and mechanical elements; and providing a battery for energizing the access control means upon response of a request signal from the remote portable transponder; and

providing an engagement means for transmitting a rotational movement as well as corresponding forces and/or moments, the engagement means having a drive mechanism and a take-off mechanism, wherein the drive mechanism and a take-off mechanism are coupled via at least one coupling element in

such a manner that;

- (h) in a decoupled state a rotation movement of the drive mechanism causes an essentially axial movement of the coupling of the coupling element, wherein the essentially axial movement of the coupling element is not sufficient for transmitting the rotational movement of the drive mechanism to the take-off mechanism; and
- (i) that in a coupled state a rotational movement of the drive mechanism causes a rotational movement of the coupling element and the take-off mechanism so that transmission of rotational movement is allowed in the coupled state but not in the decoupled state.

16. (previously presented) The locking cylinder of claim 1 including a coupling mechanism arranged to allow the axial movement of the coupling element between the first axial position and the second axial position.

17. (previously presented) The coupling mechanism of claim 16 including a locking element configured to move radially between a first position and an engaged position.

18. (previously presented) The locking cylinder of claim 16 wherein the coupling mechanism is responsive to receipt of the wireless signal.